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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/527,562

10/31/2005

Dietlinde Jakobi

JAKOBI

7326

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NEW YORK, NY 10017

EXAMINER

HOOK, JAMES F

ART UNIT

PAPER NUMBER

3754

NOTIFICATION DATE

DELIVERY MODE

08/17/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

INFO@FEIEREISENLLC.COM

Office Action Summary	Application No. 10/527,562	Applicant(s) JAKOBI ET AL.	
	Examiner James F. Hook	Art Unit 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-43 is/are pending in the application.
- 4a) Of the above claim(s) 32-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-31 and 40-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/4/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election of group I in the reply filed on June 17, 2009 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 32-39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on June 17, 2009.

Claim Rejections - 35 USC § 112

Claims 20-31 and 40-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 20, 30, and 40-42 recite a "DIN EN 10027 part 1 material" and then a list of materials that appear to be possibly a foreign standard which would not have a clear and definite definition for a specific material in the US and therefore are indefinite where the scope of the claim cannot be clearly determined when it is not known if the standard will change through time and the actual materials being claimed would have no meaning which would make reproduction impossible. The claimed subject matter should either be set forth in a standard that is more meaningful and definite, or else replaced by generic terminology for the materials by percentages of each of the components making up each material. Since the

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terminology of the claims is indefinite, the examiner will consider these limitations as a general material meeting standards for sake of speedy prosecution and making an art rejection upon the pipe structure being claimed, since it is believed the materials are not new to the industry.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-27, 30, 31, and 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torigoe (JP 2000234887). The reference to Torigoe discloses the recited pipe comprising a single piece or multipiece tube having at least two bends 1, where straight portions 2 can be provided or just the bend formed as 1 can be considered to meet the claim structure where two 90 degree bends make up a 180 degree bend, the tube is made of a metal material, opposite ends of the tube includes subsections 2 between the ends and such are provided in more than one plane and spaced apart. The reference to Torigoe discloses all of the recited structure with the exception of specific tube bend ratio's, diameters, lengths, wall thickness, and type of metal material, however such are considered merely choices of mechanical expedients where one skilled in the art would only require routine experimentation to arrive at optimum values for all the dimensions and materials used to meet the needs of the user

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as such is merely a choice of mechanical expedients. It would have been obvious to modify the pipe in Torigoe by varying the dimensions and materials of the pipe as such only requires routine skill in the art to use routine experimentation to arrive at optimum values as such is merely a choice of mechanical expedients, where one skilled in the art would be motivated to seek the optimum values for the needs of the user.

Claims 20-27, 30, 31, and 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naoi. The reference to Naoi discloses the recited pipe comprising a single piece as seen in figure 1(a) or multipiece tube as seen in figure 2(a) having at least two bends 2, where straight portions 3 can be provided, the tube is made of a metal material, opposite ends of the tube includes subsections 3 between the ends and such are provided in more than one plane and spaced apart where figure 2(b) shows a constant diameter and thickness tube. The reference to Naoi discloses all of the recited structure with the exception of specific tube bend ratio's, diameters, lengths, wall thickness, and type of metal material, however such are considered merely choices of mechanical expedients where one skilled in the art would only require routine experimentation to arrive at optimum values for all the dimensions and materials used to meet the needs of the user as such is merely a choice of mechanical expedients. It would have been obvious to modify the pipe in Naoi by varying the dimensions and materials of the pipe as such only requires routine skill in the art to use routine experimentation to arrive at optimum values as such is merely a choice of mechanical expedients, where one skilled in the art would be motivated to seek the optimum values for the needs of the user.

Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torigoe (JP 2000234887) or Naoi as applied to claims 20-27, 30, 31, and 40-43 above, and further in view of Mougin. The references to Torigoe and Naoi disclose all of the recited structure with the exception of forming the inside with a specific roughness. The reference to Mougin discloses that it is old and well known in the art to provide the interior of pipes with roughness of specific amounts where the choice of such is a choice for the user to make, and such improves the heat transfer properties of the pipe. It would have been obvious to one skilled in the art to modify the interior of the pipes in Torigoe and Naoi by providing a specific roughness as suggested by Mougin where such would improve the heat transfer properties of the pipe and where the amount of roughness is merely a choice of mechanical expedients requiring only routine experimentation to arrive at optimum values.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references to Schmidt, Snyder, Burkes, Jr., Ulrich, Crookes, Bailey, Schierholz, and Truax disclosing state of the art tubes and pipes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James F. Hook/
Primary Examiner, Art Unit 3754

JFH